

REMARKS

The Office Action mailed on December 14, 2007 has been noted, and its contents carefully studied. The undersigned representative respectfully requests reconsideration of the rejection under 35 U.S.C. §§ 102 and 103 in light of these amendments and remarks.

Claims 31-61 are pending in the present application. Claims 31, 43, 54 and 60 have been amended as set forth above. Claims 41 and 55 are objected to. The remaining claims stand rejected as follows. Claims 31-33, 35-37 and 42 are rejected under 35 U.S.C. § 102(b) over the teachings of Lumbard et al. (hereinafter: Lumbard). Claims 31, 36-37, 39-40 and 42 are rejected under 35 U.S.C. § 102(b) over the teachings of Vaudaine et al. (hereinafter: Vaudaine). Claim 34 is rejected under 35 U.S.C. § 103(a) over the teachings of Lumbard. Claim 38 is rejected under 35 U.S.C. § 103(a) over the teachings of Vaudaine in view of Li. Claims 43-54 and 56-61 are rejected under 35 U.S.C. § 103(a) over the teachings of Davidson in view of Li.

Rejection of claims 31-33, 35-37 and 42 over the teachings of Lumbard

The present Office Action rejects claims 31-33, 35-37 and 42 as being anticipated by the teachings of Lumbard. The undersigned representative respectfully disagrees in view of the above-presented amendments to claim 31.

In response to the present rejection, the undersigned representative has amended claim 31 to recite “wherein the light-emitting panel includes a plurality of micro-components containing ionizable gas;” support for this amendment is found throughout the application as filed. In contrast thereto, Lumbard teaches that the light emitting devices 15 placed on the substrate 12 are light-emitting diodes (see, e.g., column 3, line 6 or claim 3 of Lumbard), and makes no

teaching of his method being applicable to plasma displays. In view of this amendment, it is therefore respectfully requested that this rejection be withdrawn.

Rejection of claims 31, 36-37, 39, 40 and 42 over the teachings of Vaudaine

The present Office Action rejects claims 31, 36-37, 39-40 and 42 as being anticipated by the teachings of Vaudaine. The undersigned representative respectfully disagrees with this rejection in view of the above-presented amendments to claim 31.

As previously noted, the undersigned representative has amended claim 31 to recite “wherein the light-emitting panel includes a plurality of micro-components containing ionizable gas.” In contrast thereto, Vaudaine describes improvements in the fabrication methods of microtip cathodes (electron sources), which cathodes are for use in conventional cathode-ray displays (see, e.g., claim 1 or column 1, lines 18-21 of Vaudaine). Vaudaine makes no teaching of his method being applicable to plasma displays. In view of this amendment, it is therefore respectfully requested that this rejection be withdrawn.

Rejection of claim 34 over the teachings of Lombard

According to well-established precedent, the Patent Office bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. Referring to MPEP § 2142, in order to establish a *prima facie* case of obviousness, three basic criteria must be met:

(1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;

- (2) there must be a reasonable expectation of success; and
- (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The present Office Action rejects claim 34 as being rendered obvious by the teachings of Lumbard. As noted above, the undersigned representative has amended claim 31 to recite “wherein the light-emitting panel includes a plurality of micro-components containing ionizable gas,” and respectfully submits that Vaudaine makes no teaching that can be equated to this limitation. Since claim 34 depends from claim 31, the undersigned representative respectfully submits that this amendment also overcomes the rejection of claim 34, and requests that this rejection be withdrawn.

Rejection of claim 38 over the teachings of Vaudaine in view of Li

The present Office Action rejects claim 38 as being rendered obvious by the teachings of Vaudaine in view of the teachings of Li. As noted above, the undersigned representative has amended claim 31 to recite “wherein the light-emitting panel includes a plurality of micro-components containing ionizable gas,” and respectfully submits that Vaudaine makes no teaching that can be equated to this limitation. Moreover, Li makes no teaching that remedies this deficiency in the teachings of Vaudaine. Since claim 38 depends from claim 31, the undersigned representative respectfully submits that this amendment also overcomes the rejection of claim 38, and requests that this rejection be withdrawn.

Rejection of claims 43-54 and 56-61 over the teachings of Davidson in view of Li

The present Office Action rejects claims 43-54 and 56-61 as being rendered obvious by the teachings of Davidson in view of the teachings of Li. Briefly, the Office Action asserts that Davidson teaches every feature of independent claim 43 except for the limitation that a portion of the light-emitting panel being manufactured prior to the completing of the light-emitting panel, testing the portion of the light-emitting panel, and determining if the portion of the light-emitting panel is produced within acceptable tolerances.

In response to this rejection, the undersigned representative has amended claim 43 to recite that “wherein the micro-components comprises a shell at least partly filled with ionizable gas;” support for this amendment is found throughout the application as filed. In contrast thereto, the microbead 1 of Davidson, which the Office Action equates with the micro-component of the pending claims, is “an electrically resistant microbead 1 of incandescent material.” (column 3, lines 46-47 of Davidson) As is already clear from this description, the microbead of Davidson’s invention is fundamentally different from the micro-component of the amended claims, in that its luminescent properties are the result of incandescence, rather than gas ionization. Further illustrating this point, the micro-component of the pending claims is hollow (the interior space being filled with the ionizable gas), whereas Davidson’s microbead is solid; see, e.g., column 5, line 67-column 6, line 34 of Davidson:

Fabrication and assembly of the bead-like elements 1 may be done in any of a variety of ways such as mechanically fastening or clamping said beads 1 to the electrodes 2, 3. But as a typical display panel of the present disclosure may have well over a million individual elements 1, said elements 1 must be capable of being reliably produced and attached to the panel en masse, as by the following nonmechanical manner, or similar:

The substrate panel 4 with attached electrodes 2, 3 is placed level on a support, electrode 2, 3 side facing up. A very finely divided powder of a suitable incandescent substance such as tungsten is spread or sprinkled onto the substrate 4, entirely covering it. Powder depth shall be as determined by the design spacing which separates the bead 1 from the substrate 4 in the completed panel, and shall be controlled by the height to which the top surface of the electrodes 2, 3 extend above the substrate panel 4. Powder is very carefully removed, in a level manner, as by scraping, until the very top surface of the electrodes 2, 3 is just barely revealed. Then a small diameter pulsed laser beam is applied to the top of the powder layer, tracing a short path between a row 2 and a column electrode 3, near their intersection, in the exact location where the bead 1 is desired. The energy of the laser beam, its pulse duration, and its speed of movement shall be just sufficient to melt a small mass of powder particles together as it passes over them, and weld the ends of the newly melted mass to each electrode 2,3. The laser melting operation shall be done in an inert atmosphere to protect the tungsten, and shall be done under rapid automatic control, melting and welding tungsten masses to every row 2 and column electrode 3 intersection on the panel. After the molten mass 1 has cooled and solidified, it will have been formed into a solid microbead 1, both ends of which are securely welded to the metal driving electrodes 2, 3. (emphasis added)

The undersigned representative respectfully submits that, in view of this amendment to claim 43, the teachings of Davidson cannot be equated to the invention described by the pending claims, and respectfully requests that this rejection be withdrawn.

Objection to claims 41 and 55

The present Office Action objects to claims 41 and 55 as being dependent upon a rejected base claim, but indicates that they would be allowable if rewritten in independent form. The undersigned representative thanks the Examiner for this indication of allowable material. In view of the above-presented amendments and arguments, it is respectfully submitted that all pending claims are now allowable over the cited prior art.

CONCLUSION

The undersigned representatives reserve the right to file continuation applications to seek protection for other novel aspects of the present invention, including those included in any cancelled claims.

For all of the above reasons, it is respectfully submitted that the claims now pending patentably distinguish the present invention from the prior art of record. Accordingly, reconsideration and withdrawal of the outstanding prior art rejections and an issuance of a Notice of Allowance are earnestly solicited. Should the Examiner have any comments, questions or suggestions of a nature necessary to expedite prosecution of the application, he is courteously requested to contact the undersigned representative at the number listed below.

No additional fees are believed due; however the Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment to Deposit Account number 50-4402.

Respectfully submitted,

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